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AUTHOR Forlizzi, Lori A.; Askov, Eunice N.

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ABSTRACT

A visually oriented educational model that was originally developed for use with children was adapted for use with adults in an adult basic and literacy education class. The four-step visual literacy model required students to perform the following actions while reading an entire novel: visualize, inquire, read, and apply. A General Educational Development (GED) teacher and a life skills teacher were trained to use the model with students. Ten GED and five life skills students completed the entire program, including pre- and posttests. An additional 12 students started the program but did not complete it for various reasons. A comparison of the 15 completers' pre- and posttest scores indicated that the students achieved gains in knowledge of general and Spanish vocabulary but no significant gains in general knowledge. The students' attitudes toward fiction became more positive at the end of the project. When interviewed and asked to complete attitude surveys, the teachers and students alike were enthusiastic about the program and felt that the materials and activities helped the students develop comprehension and thinking skills. (Appended are the assessment instruments, interview questions, and student attitude survey results.) (MN)

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INSTITUTE FOR THE STUDY OF ADULT LITERACY

Visual Literacy: A Neglected Component

Final Report

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Visual Literacy: A Neglected Component

Final Report

Authors:

Lori A. Forlizzi
Research Associate

Eunice N. Askov
Principal Investigator
Professor of Education and Director

Institute for the Study of Adult Literacy
Penn State University
204 Calder Way, Suite 209
University Park, PA 16801-4756
(814) 863-3777

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Abstract Page

Title: Visual Literacy: A Neglected Component

Project No.: 98-3007 Funding: $12,228

Project Director: Eunice N. Askov Phone No.: (814) 863-3777

Agency Address: Institute for the Study of Adult Literacy
The Pennsylvania State University
204 Calder Way, Suite 209
University Park, PA 16801-4756

Description:
This project addressed State Priority B.2 by adapting a visual literacy model and materials for adults and exploring their impact on ABLE students. The program is built around Scott O'Dell's novel *The Black Pearl*, and includes materials and activities designed to help learners visualize the story, to aid comprehension and to support the development of knowledge and thinking skills. Materials include a video based on the novel, prediction prints, an audiocassette of the movie soundtrack, and a teacher's guide with information and activities. The visual literacy model suggests ways in which the novel and the materials can be used.

Objectives:
1. Adapt an existing, visually oriented educational model for use with adults.
2. Develop a curriculum-based assessment to analyze the model.
3. Train ABLE instructors in use of the program.
4. Implement and evaluate the project.
5. Disseminate the project findings.

Target Audience:
A GED reading and a life skills teacher implemented the program with their students. This report will be of interest to program administrators and teachers working with these populations.

Product(s) -- if applicable:
The final report includes a description of the visual literacy model and how it was adapted by the teachers. The report includes a description of the materials and the teacher training, and documents the exploratory evaluation and its results.

Method(s) of Evaluation:
Changes in general knowledge, general vocabulary, Spanish vocabulary, and attitudes toward fiction and movies during the course of the project were documented. Feedback from the teachers provided assessments of students' comprehension and thinking skill development. Students and teachers participated in interviews at the end of the project period.

Findings:
Students showed gains in knowledge of general vocabulary and Spanish vocabulary from the beginning to the end of the project. There was some indication that students held a more positive attitude toward fiction at the end of the project. Teachers and students felt that the materials and activities aided comprehension and thinking skills development. Both teachers and students were enthusiastic about the program.

Conclusions:
The model and materials tested in this project are adaptable to GED reading and life skills classes. An experimental study with a control group should be carried out to determine whether the program does indeed develop adult learners' knowledge, skills, and comprehension.

Descriptors: (To be completed only by AdvancE staff)

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INTRODUCTION

The goal of this project was to research and evaluate Adult Basic and Literacy Education (ABLE) students' use of a program consisting of a visual literacy model and materials that have been developed and tested with children. A teacher working with students preparing for the Tests of General Educational Development (GED) and a life skills teacher at the Tuscarora Intermediate Unit Adult Education and Job Training Center in Lewistown, Pennsylvania implemented the program with GED reading and life skills students. A total of 27 students used the materials.

The program is built around Scott O'Dell's novel *The Black Pearl*, and includes materials and activities designed to help learners visualize the story, to aid comprehension, and to support the development of knowledge and thinking skills. The materials include a film-length motion picture adaptation of the novel on video (entitled *The Secret Cave*), which presents a slightly different version of the story (for example, the endings of the book and the video are different). The materials also include prediction prints (a series of poster-sized enlarged color prints from the movie scenes) and an audiocassette of the movie soundtrack. An accompanying teacher's guide includes information that can help build students' background knowledge related to the story (for example, information on how pearls are made, a map of Baja California, Mexico, where the story takes place, and information about Mexican family life and customs), book chapter concepts that pose a problem or issue to be resolved, and suggested activities students can use to resolve the problem or issue (for example, who owns the pearl?). The activities involve learners in reading, writing, and discussion; some activities involve mathematics. The teacher's guide also includes an appendix with further activities, summaries of numerous children's books on themes related to the story, bibliographies on Mexico and pearls, and a glossary of Spanish words.

MobileVision Technology, Inc. of Key Biscayne, Florida, developed the visual literacy model and materials as part of their *Classic Book and Video* series. Spanish versions of the materials and a 12-minute feature video on making the movie *The Secret Cave* are also available, although they were not used in this project.

The visual literacy model is a recommended approach for implementing the program. It is designed to help students comprehend the story and develop knowledge and thinking skills as they interpret and relate the story to their lives or explore topics related to the story. There are four steps in the model: visualize, inquire, read, and apply. In the visualize step, program materials help students develop images related to the story. The audiocassette of the movie soundtrack, or doing research on the setting of the story and the way of life of the Mexican people, can be used. In the inquire step, students make predictions about what will happen in the story, using the prediction prints or information gathered in researching the setting. In the read step, students read the book or watch the movie, and can discuss their predictions in terms of what actually happens in the story. Finally, in the apply step, the book chapter concept activities or other activities related to the story can be done. It is important to note that this is only one recommended approach to using these materials. The program developers emphasize that teachers should feel free to fit the activities built around these materials to "...the learning styles, content backgrounds, and skill levels of a specific target audience" (Mallery & Swimmer, 1992, p. 4). As a result, the materials can be used in many different ways. For example, the video can be shown to less able readers before they read the book as part of the visualize step. Teachers can design their own activities around the book or video.

Background and Rationale for the Project

In recent years, there has been a growing emphasis on developing adults' literacy skills around needs imposed by societal demands; for example, to help adults become better workers or parents. Kazemek (1992) has warned literacy educators against adopting such a narrow focus for literacy development. He emphasizes that the goal of literacy development should be broadened to encompass literacy for personal enjoyment and development. He argues that stories, be they students' stories or other literary texts, are central to adult literacy education. By sharing their own life stories and sharing in the life stories of others, adults can experience personal understanding and growth. They can also learn to enjoy literacy for its own sake.

How can literacy educators interest busy adult students who often have an immediate goal in mind (getting a GED or finding a job) in reading fiction? Video is a prevalent medium in our society, and many individuals enjoy losing themselves in a story on screen. Linking video with written fiction might transfer this enjoyment to books and reading. The visual literacy model developed by MobileVision for children combines supports in the form of an audiocassette, a video, and prediction prints with activities that help learners tie the story to their own lives and provide a framework for knowledge development and personal development. The visual literacy model and materials could help adults become more interested in reading fiction, broaden their knowledge, enhance their comprehension, and develop their thinking skills. If the model and materials are shown to be successful with adults, they could be adapted to work with other novels of interest to adults. A quick scan of the racks at any bookstore or video store reveals that many novels, including some great works of literature, have been made into movies.

Purpose and Objectives

The purpose of the project was to determine whether the visual literacy model and materials developed by MobileVision could develop adults' enjoyment of fiction in general, and enhance their comprehension, knowledge, and thinking skills related to the particular story (Scott O'Dell's *The Black Pearl*). The project objectives were:

1. Adapt an existing visually oriented educational model for use with adults;
2. Develop a curriculum-based assessment to analyze the model;
3. Train ABLE instructors in use of the program;
4. Implement and evaluate the project;
5. Disseminate the project findings.

Time Frame

The project was conducted between July 1, 1992 and June 30, 1993. During the first project quarter, project and site staff held a project planning meeting. Dr. Mallery presented the materials to the site staff, and possible evaluation plans were discussed. During the second quarter, the teachers familiarized themselves with the materials and planned how they might use them with their students. The teachers decided that they would use the existing materials and activities in the teacher's guide and adapt their own materials and activities as they worked with students. Institute staff developed evaluation instruments with input from site staff. During the third project quarter, Dr. Mallery trained teachers in how to use the materials. Dr. Forlizzi and Mr. Schmidt trained teachers in how to administer the evaluation instruments. During the third and fourth quarters, the project was implemented with a pilot group of GED students, two other GED classes, and with life skills students working in three small groups of two or three. Analyses were completed. The final report was written and dissemination

activities carried out during the two months after the completion of the project period.

Audience

The learners who tested the materials were adult students in GED and life skills programs (the life skills program at the participating site provides work preparation for adults with little or no work experience, most of whom are currently on public assistance). This report and the materials described within it will be of interest to teachers and administrators working with adults in similar programs.

Project Staff and Key Personnel

Penn State University's Institute for the Study of Adult Literacy directed the project. Dr. Eunice Askov, Principal Investigator and Director of the Institute, was responsible for conceptualizing and designing the project along with Dr. Anne Mallery of Millersville University and MobileVision. Dr. Askov was also responsible for project administration. Dr. Mallery co-authored the visual literacy model and materials that were tested in this project along with Mr. Saul Swimmer, also of MobileVision. Dr. Lori Forlizzi, Research Associate at the Institute, was responsible for project planning, development and evaluation. R. James Schmidt, a graduate assistant at the Institute, assisted in project development, evaluation, and data analysis. The Tuscarora Intermediate Unit Adult Education and Job Training Center implemented the project. Carol Molek, the Adult Education Coordinator, served as the initial contact at the site. Barbara Goss and Kelly Barron, teachers at the Job Training Center, used the materials with GED reading and life skills students.

The project team originally intended to implement the program at a second site (Altoona Area School District's Community Education Center). In talking to the director of the center, the team learned that virtually all instruction there

occurs on an individual basis. It was determined that attempting to set up groups of students for the purpose of this project was not feasible. With the permission of the Pennsylvania Department of Education, the program was implemented solely at the Tuscarora Intermediate Unit Adult Education and Job Training Center. However, this site afforded the opportunity for the materials to be pilot tested in two different environments (GED reading classes and life skills classes).

Address Where Materials May Be Obtained

Information about the visual literacy model tested in this project, the materials, and training in how to use them may be obtained from MobileVision Technology, Inc., 340 Caribbean Road, Key Biscayne, FL, 33149, (305) 361-8411.

Address Where Report May Be Obtained

Copies of this final report may be borrowed from:

Division of Adult Basic and Literacy Education Programs
Pennsylvania Department of Education
333 Market Street
Harrisburg, PA 17126-0333

and from the Department of Education's adult education resource clearinghouse:

AdvancE
Pennsylvania Department of Education
PDE Resource Center
333 Market Street
Harrisburg, PA 17126-0333

STATEMENT OF THE PROBLEM

Writers on adult literacy education (e. g., Kazemek, 1992) have called for an increased focus on developing literacy for personal growth and enjoyment. Combining a work of fiction with visual supports and application activities should

enhance adults' comprehension, knowledge, thinking skills, and enjoyment of fiction. The following objectives were proposed:

1. Adapt an existing visually oriented educational model for use with adults;
2. Develop a curriculum-based assessment to analyze the model;
3. Train ABLE instructors in use of the program;
4. Implement and evaluate the project;
5. Disseminate the project findings.

PROCEDURES

The following sections describe the procedures followed in achieving each objective.

Adapt an Existing, Visually Oriented Educational Model for Use With Adults

Teachers received copies of video and print materials (the book, the video, the prediction prints, the soundtrack and the teacher's guide, which outlined the visual literacy model) so that they might look over them and identify adaptations needed for adult students. Both teachers chose to use some of the materials and activities in the teacher's guide as they were and also to develop their own activities around the book, video, and audiocassette. For example, the GED teacher chose to use the materials in an "academic" way that would help prepare students for the GED test, while the life skills teacher emphasized an approach that helped the students tie the materials to their goals and life experiences. The models that they adapted will be described in the section on implementing and evaluating the project.

Develop a Curriculum-based Assessment to Analyze the Model

The MobileVision materials developed around *The Black Pearl* are designed to stimulate students' interest and build background knowledge in ways that help

students comprehend the story and develop thinking skills. Comprehension and thinking skills can be developed in a variety of ways depending on the materials and activities that the teacher chooses to use. It was determined that teachers would be the best judges of their students' comprehension of the story and use of thinking skills in the specific activities they developed. Feedback from the teachers thus provided assessments of students' comprehension and thinking skills development.

Project staff developed a variety of assessment instruments to track student changes over the course of the project. Staff drafted the assessment instruments, met with the teachers to discuss the drafts, then incorporated the teachers' suggestions into the final products. Assessment instruments measured students' development of general vocabulary, Spanish vocabulary, and general knowledge related to the story (for example, knowledge about the climate of La Paz) over the course of the program. A questionnaire measured any change in students' attitudes toward fiction and movies over the course of the program. These assessments are included in Appendix A. Students completed the vocabulary, general knowledge, and attitude assessments before they began the program and again after its completion. Project staff also developed questions to be used in interviewing students and teachers at the close of the project about the program, the materials, and their impact. These interview questions are included in Appendix B.

Train ABLE Instructors in Use of the Program

Dr. Mallery, Dr. Forlizzi, and Mr. Schmidt conducted a half-day training session for the teachers on January 15, 1993. Dr. Mallery conducted the first part of the training and focused on the visual literacy model, the book and the accompanying supplemental materials, and how they might be used. She began by giving an overview of the visual literacy model, emphasizing its flexibility and

adaptability. Throughout the training, Dr. Mallery modeled the teacher's role in using the materials, while the teachers and Institute staff participated as adult learners would. She first used the audiocassette to help the "learners" visualize the mood of the story, then reviewed with them a map of Baja California, Mexico. She read the first chapter of the book aloud, and led a discussion about the nature of the manta diablo (the monster in the story) that demonstrated one of the activities in the teacher's guide. She gave some other suggestions for how the materials might be used, including discussing the differences and similarities between the book and the video, or having students read the book in pairs. Dr. Forlizzi and Mr. Schmidt then conducted the second part of the training, describing the assessment instruments and how to use them in data collection.

Implement and Evaluate the Project

This section describes how teachers at the cooperating site implemented the program with GED and life skills students. Ten GED students in two classes and five life skills students working in two separate groups (one consisting of two students, the other three students) completed the entire program, including the pre- and post-program assessment instruments. Five GED students in a pilot group and four students in the monitored GED classes did not complete the assessment instruments. A third group of three life skills students started the program but did not complete it for various reasons (for example, one student left the area to take a job). Dr. Forlizzi monitored implementation of the program by telephone and site visits during the project. The methods for evaluating the project, and the results of the evaluation, are also presented in this section.

Implementation in GED Reading Classes

The GED teacher worked with both classes in the same way after briefly testing the video and some of the background materials with the pilot class early

in the project. She began to use the materials immediately after she finished a unit on geography that included information on Mexico. She distributed to the students and discussed with them background information from the teacher's guide, including the map of Baja California, Mexico, information on how pearls are made, on the customs and traditions of the Mexican family, on La Paz, and pages on the characters and the conflicts between them. She also used the program as an opportunity to discuss plot structure. She introduced the components of a plot (set-up and conflict, climax and outcome) to the students, and as they read the book, they discussed the events that represented components of the plot. The teacher read the first five chapters aloud in class as the students followed along. The students took their books home with them and finished reading the book for the next week's meeting. At that meeting, the students watched the video and discussed the differences between the book and the video.

Implementation With Life Skills Students

With groups of life skills students, the life skills teacher introduced the program by discussing the location, climate, religion, and culture of Mexico, using the map in the teacher's guide. She also used the Spanish glossary in the teacher's guide to introduce and review Spanish vocabulary. The teacher read Chapter One of the book aloud, then students read subsequent chapters on their own. Students read sets of two or three chapters, and discussed related questions and issues taken directly from or adapted from the teacher's guide. These questions and issues included the following: Is the manta diablo (the monster in the story) real or mythical? What is the role of religion in the culture of the people in the story? What were the feelings between Ramon (the main character of the story) and his father? Students also were asked to make predictions about the story: What would Ramon find when he went into a cave that he had been forbidden to enter? What would he do with the pearl? Students then watched the

part of the video that corresponded to each particular set of chapters and discussed differences between the book and the video. The teacher distributed additional materials from the teacher's guide as students requested them (for example, information on how pearls are made). Students in one group expressed an interest in learning more Spanish words. The teacher brought some Spanish books to class and used them to teach additional Spanish words and phrases. Students practiced these words and phrases by using them in simple sentences. These students eventually read a children's book in both the English and Spanish versions.

The life skills teacher added more to this basic plan by the time she worked with her final group. With this group, she began the program by playing the audiocassette of the movie soundtrack and asking students to predict the mood of the story based on the music they heard. She also asked them to discuss personal experiences brought to mind by the tape. She asked these students to do a writing assignment based on the novel. They were to write either about a conflict they had with someone or about how they felt at a time when they had accomplished something important in their lives as Ramon, the main character, had when he could hold his breath long enough to dive for pearls. The students present that day both chose to write about the births of their children. The teacher also asked students to discuss the different endings of the book and the video, and to talk about the story ending that they preferred.

Project Evaluation

Students completed the vocabulary, Spanish vocabulary, general knowledge, and attitude assessments before they began the program and again upon its completion. Ten GED and five life skills students completed both the pre- and post-program assessments. Dependent t-tests were conducted on students' scores on the vocabulary and general knowledge measures to determine whether there

was a significant increase in scores on these assessments from pre- to post-testing. Comparing responses on the attitude questionnaires given before and after the program allowed project staff to determine whether those responses changed from the beginning to the end of the program. Students and teachers participated in interviews at the end of the project period. Eight GED students and five life skills students who completed the program were available to be interviewed. Project staff summarized student and teacher responses to the interviews to gain information about their impressions of the program and its effects on students.

General Vocabulary Development

There were 35 items on the general vocabulary assessment. Scores on the pretest ranged from 11 to 32, with a mean or average score of 24 and a standard deviation of 7.5. (The standard deviation indicates the average deviation of the scores from the mean). Scores on the posttest ranged from 11 to 35 with a mean score of 28 and a standard deviation of 6.5. The t-value was 3.691, which indicated that the posttest scores were significantly higher than the pretest scores. The probability of this difference occurring by chance is less than .0024. Thus, students showed gain in general vocabulary knowledge from the pretest to the posttest.

Development of Spanish Vocabulary

There were 15 items on the Spanish vocabulary assessment. Scores on the pretest ranged from 4 to 15, with a mean score of 9 and a standard deviation of 3.7. Scores on the posttest ranged from 5 to 15 with a mean score of 12 and a standard deviation of 3.2. The t-value was 4.111, which indicated that the posttest scores were significantly higher than the pretest scores. The probability of this difference occurring by chance is less than .0011. Students showed gain in Spanish vocabulary knowledge from the pretest to the posttest.

General Knowledge Development

There were 5 items on the general knowledge assessment. Scores on the pretest ranged from 2 to 5, with a mean score of 3.2 and a standard deviation of 1.0. Scores on the posttest ranged from 2 to 5 with a mean score of 3.4 and a standard deviation of .91. The t-value was .716, which indicated that the posttest scores were not significantly higher than the pretest scores. Students thus showed no gains in general knowledge related to the story (as measured by this brief assessment) from the pretest to the posttest.

Student Attitudes Toward Fiction and Movies

Data on students' responses to the attitude questionnaire before and after they participated in the program are presented in Appendix C. The questionnaire items clustered along four main themes. Results regarding each of these themes will be described. In general, while attitudes towards fiction were positive before the program, there was some indication of improved attitudes on the post-assessment.

One major theme focused on students' beliefs about the worth of nonfunctional reading (an example of an item that tapped this is the following: "most adults would be better off if they just read what was necessary to get a particular job done"). Student responses to most of these items indicated that they tended to feel that nonfunctional reading was worthwhile, both before and after they participated in the program. The responses indicated a slightly greater tendency to feel that nonfunctional reading was worthwhile after the program. For example, 13 of the 15 respondents agreed with or were undecided about the statement "reading helps people the most by giving them the facts they need to know" on the pretest; however, on the posttest, 11 agreed or were undecided while four disagreed. Also on the pretest, only seven disagreed with the item

"reading fiction is entertaining, but you don't learn anything important," while all 15 respondents disagreed with that statement on the posttest.

A second theme related to the importance of reading different types of materials, such as newspapers, magazines, fiction, or textbooks. Students tended to agree both before and after the program that reading different types of materials would help broaden their abilities or knowledge in some way. Thirteen respondents agreed with the statement "almost all types of reading materials are informative and worth reading" on the posttest; only eight had agreed with this statement on the pretest, while four disagreed and three were undecided.

Other items tapped students attitudes about the relationship of video to fiction (for example, "if you have read a book, there is no reason to see the movie based on it.") Both before and after the program, students' answers indicated that books and movies based on them were not necessarily substitutes for each other; reading a book and watching a movie based on it both had value. Responses to one item did change from the pretest to the posttest; this change indicated a somewhat more favorable view of books compared to movies at the time of the posttest. On the pretest, seven disagreed with the statement "watching a movie based on a book is just as good (informative) as reading the book;" 11 disagreed with this statement on the posttest.

A fourth theme was enjoyment of different types of reading materials and movies. Students tended to agree, both before and after participating in the program, that they enjoyed reading magazines, the newspaper, textbooks or other materials that help them learn, and watching movies. More students indicated that they enjoyed reading fiction on the posttest than on the pretest. Eleven agreed that they enjoyed reading fiction on the pretest; 13 agreed with this statement on the posttest.

Teacher Interviews

This section summarizes the interviews with the life skills and GED teachers (the interview questions are located in Appendix B).

Teacher impressions of student response to the program. The life skills teacher noted that her students responded positively to the program. They looked forward to reading upcoming sections of the book in class and asked to learn information related to the story (information on black pearls, for example). The GED teacher noted that at first, her students were somewhat skeptical and uneasy about the program -- mostly because they were being asked to read a whole book, which they had not done in class. She emphasized to students that the program would help them develop skills they would need to pass the GED reading test, including thinking skills, vocabulary, and question-answering skills, and it would expose them to literature. She noted that once the students began reading the book and saw the direction and purpose of the program and how it would help them, they were enthusiastic about the program. She felt that the materials set the foundation for some excellent discussions in her groups. Both teachers felt that the subject matter of the story was appropriate for their students and held their interest.

Teacher impressions of the program. Teachers' overall reactions to the program were positive. The life skills teacher noted that it is a very creative way to teach reading and critical thinking. She felt that it supported learning by requiring the students to think and express their thoughts. The GED teacher felt that it complemented other things she was doing with her classes, especially related to the study of geography. She felt that the program was especially helpful for students who benefit from visual supports during learning. Both teachers felt that the materials and activities they used helped students comprehend the story and develop thinking skills. They noted that the program

kept students' interest and gave them ideas to explore and express. It also got students thinking about how they handle interpersonal situations similar to those the characters in the story experience. Teachers also saw the program as a confidence-builder for the students. Both indicated that they would continue to use the materials in their classes, and felt that other life skills and GED reading teachers should try them.

Both teachers noted that what they liked best about the program was the discussions that were prompted by the materials. The life skills teacher liked the issues for discussion in the teacher's guide, noting that they were good discussion prompts. The GED teacher liked the discussions that evolved out of the comparison of the video and the book.

There was only one negative comment about the program. One teacher felt that some of the characters in the video represented negative stereotypes. She noted that the "bad guy" in the story was the only black in the movie, while the mother (the only female in the story) was depicted as whiny and selfish. She feels that this is a problem in many materials for adult students. She would encourage MobileVision to be more sensitive to such depictions in the future. She also noted, however, that teachers can openly discuss such stereotypes in class and can make a point to bring other materials to class that depict adults of different race and gender in positive ways.

The teachers were asked to compare the program to how they would normally teach reading or study skills. Both felt that it was not very different in terms of discussions and activities. The life skills teacher noted that bringing in a work of fiction was different for her, and a positive step. The GED teacher said that the program fit nicely with her typical emphasis on teaching vocabulary. She noted that having the students read a whole book rather than shorter passages was different for her, and that she used the opportunity to teach plot structure.

Student Interviews

Thirteen students (eight GED and five life skills) were interviewed about the program. All 13 responded positively when asked what they thought about the program overall. Individual comments indicated that students liked the visual components of the program; students also noted that the program kept their interest and that the activities helped their understanding of the story. All students agreed that it was worth their time to participate. Two noted that they appreciated the opportunity to learn Spanish words. Two said they liked this program best of all the activities they did in their classes. One noted that the program gave her a welcome opportunity to read -- something that she has little time for with three children.

Students were asked to tell what they liked most and least about the program. The positive aspects that were mentioned varied, although four mentioned the discussions as the thing they liked best. Four said they liked the book or reading the book, and three mentioned that they liked the book better than the video. Two said that they liked the movie. Nine of the 13 respondents responded "nothing" or "don't know" when asked to name an aspect of the program that they liked least. The aspects that the remaining four students said they liked least included reading the book (2), the movie (1), and switching between the book and the movie (1).

Students were asked to compare this program to other reading units they have done in the past, either in school or in other adult education programs. Eleven out of 13 said it was better overall; 11 said they liked it more, learned more, and found it more interesting than other reading units they have done it the past. The reasons they mentioned for liking the visual literacy program more included the fact that the video helped them comprehend and retain more of the story, and that they appreciated the opportunity to do activities around the story and discuss it.

Three mentioned liking the fact that the teachers "took it slow" and broke the lessons down chapter by chapter.

Students unanimously felt that this was a good method of teaching reading and all would recommend that other adult students participate in the program. Ten said they would change nothing about the program. Two suggested that the story in the video be made more like that in the book; one student would have liked to do more reading of the book in class with other students.

Disseminate the Project Findings

This final report is available through AdvancE and through the Institute for the Study of Adult Literacy. The Institute will also publicize the project and final report nationwide through its informational brochure and its newsletter (*Mosaic: Research Notes on Literacy*). Information on the project will also be disseminated through professional journals, such as *Adult Basic Education* or *Journal of Reading*.

CONCLUSIONS AND RECOMMENDATIONS

Students showed gains in knowledge of general vocabulary and Spanish vocabulary from the pretest to the posttest. There was also some indication that students held a more positive attitude toward fiction at the time of post-testing. Because there was no control group (a group of students who took the pre- and post-program assessments but did not participate in the program) for comparison purposes, it cannot be determined with certainty that these changes resulted from participation in the program.

Both teachers and students had positive reactions to the program. Both the GED and life skills teachers felt that the materials and activities they used helped their students comprehend the story and develop thinking skills. They were most enthusiastic about the discussion that the materials and activities prompted with their students. Both felt that the program fit in well with methods and activities

they typically use. They enjoyed the experience of bringing an entire novel into their classrooms.

Students found the materials and activities interesting and fun to use. They felt that supplementing the book chapters with the video and activities helped their comprehension and retention of the story. Students enjoyed the opportunity to read an entire novel, and many came to favor it over the movie.

The visual literacy model and materials tested in this project are adaptable to GED reading and life skills classes. The GED teacher adopted an academic focus, emphasizing with her students knowledge and activities that would help prepare them for the reading portion of the GED. The life skills teacher adopted an interpersonal focus, helping her students relate the relationships and events in the story to their lives and goals. As teachers became more familiar with the materials, they produced new ideas about ways in which to adapt the materials to their students' needs and tried some of them out. Teachers and students enjoyed the materials. Both teachers and students believed that students' comprehension, knowledge, and thinking skills developed as a result of participation in the program; the results of pre- and post-testing show some support for their beliefs. These positive reactions and indications suggest that an experimental study with a control group should be carried out to determine whether the program does indeed develop adult learners' knowledge, thinking skills, and comprehension.

References

Kazemek, F. E. (1992). Looking at adult literacy obliquely: Poetry, stories, imagination, metaphor, and gossip. *Adult Basic Education*, 2, 144-160.

Mallery, A., & Swimmer, S. (1992). *The Secret Cave Teacher's Guide*. Key Biscayne, FL: MobileVision Technology, Inc.

Appendix A

Assessment Instruments

Vocabulary **Read the following definitions. Match the words from the list below with the definitions. Write the words in the blanks.**

manta	fleet	nonetheless	haggle	coax
kilo	carat	madonna	anchor	incense
solemn	admonition	harpoon	flaw	braggart
lagoon	merchants	niche	driftwood	leagues
banish	pearlers	spyglass	tentacles	barren
paragon	garland	belfry	summon	accuracy
sink stone	pinnacle	calipers	mourners	tiller

1. A defect or feature that makes something less than perfect. _____
2. A unit of weight used in measuring gems. _____
3. An organized group of boats or ships. _____
4. A grave, sober, or serious mood. _____
5. A bell tower. _____
6. Counsel, advice, or caution; a mild warning. _____
7. Sticks, branches, or stumps washed up on shore. _____
8. A small lake or pond, often connected to a larger body of water. _____
9. A substance that is burned to produce a sweet odor. _____
10. A small telescope. _____
11. To send away as punishment. _____
12. A place set in a wall for a statue. _____
13. _____meter. A measure of distance, a little longer than 1/2 mile.
14. An example of excellence; the best. _____
15. Slender, flexible armlike body parts of some animal. _____
16. Not able to grow or keep growing. _____
17. The degree or amount of correctness. _____
18. A picture or statue of the Virgin Mary. _____

Vocabulary **Read the following definitions. Match the words from the list below with the definitions. Write the words in the blanks.**

manta	fleet	nonetheless	haggle	coax
kilo	carat	madonna	anchor	incense
solemn	admonition	harpoon	flaw	braggart
lagoon	merchants	niche	driftwood	leagues
banish	pearlers	spyglass	tentacles	barren
paragon	garland	belfry	summon	accuracy
sink stone	pinnacle	calipers	mourners	tiller

19. _____ ray. A huge fish with a flattened body.

20. People who make a living by diving for pearls. _____

21. To try and get someone to do something through gentle persuasion or temptation. _____

22. People who buy and sell things for a living. _____

23. A person who is always talking about himself with pride and boasting. _____

24. A tool for measuring how thick something is. _____

25. To call or ask someone to come. _____

26. A bar or handle used to help steer a boat. _____

27. A heavy rock or stone used to help divers reach the bottom of the sea. _____

28. A high peak, or the highest point of success. _____

29. People who show sadness at a funeral. _____

30. However. _____

31. A measurement of distance used on sea; equal to about three miles. _____

32. A long spear with a hooked end used for killing large fish. _____

33. To disagree and argue over terms of a deal. _____

34. A wreath of flowers hung on someone or something for decoration. _____

35. Something heavy used to keep a boat from drifting. _____

Vocabulary **Read the following definitions. Match the words from the list below with the definitions. Write the words in the blanks.**

Cortez	**frijoles**	**Sevillano**	**chubasco**	**burro**
sombrero	**diablo**	**isla**	**muerto**	**pesos**
fiesta	**Vermillion**	**ambergris**	**madre**	**dios**

1. A small donkey used as a pack animal. _____
2. Spanish word for death or dead person. _____
3. A yellowish gray color. _____
4. The Spanish conqueror of Mexico. _____
5. A violent thunderstorm on the Pacific coast of Central America.

   _____
6. Spanish word for god. _____
7. A man from Seville, Spain. _____
8. Another name for the Sea of Cortez or the Gulf of California.

   _____ Sea
9. Spanish word for devil. _____
10. Spanish word for beans. _____
11. Spanish word for island. _____
12. A Mexican hat. _____
13. A Mexican form of money equal to 100 centavos. _____
14. Spanish word for mother. _____
15. A festive celebration; a large party. _____

Multiple Choice

Please read the following statements and circle the letter before what you think is the best answer. Circle only one answer for each statement. Select an answer for every statement, even if you have to guess.

GENERAL

1. La Paz is located in _____.
   a. Columbia
   b. Baja California
   c. New Mexico
   d. Spain

2. Another name for the Gulf of California is _____.
   a. The Gulf of Mexico
   b. The Verde Sea
   c. The Sea of Cortez
   d. The Sea of De Leon

3. Baja California is a state in _____.
   a. Portugal
   b. South America
   c. The U.S.A.
   d. Mexico

4. Mexico was conquered by the Spanish explorer _____.
   a. Ponce De Leon
   b. Juan Valdez
   c. Junipero Sierra
   d. Hernando Cortez

5. In general, the climate in la Paz is _____.
   a. Warm and dry
   b. Cool and rainy
   c. Warm and rainy
   d. Cool and dry

ATTITUDE SURVEY

The following survey is designed to record your attitudes or *feelings* toward reading different types of materials. Please read the following statements carefully. Indicate how much you agree with each statement by circling the one response below that best reflects how *you* feel about the topic.

Example: Attending Life Skills classes will help me get a job.

Strongly Agree Agree Undecided Disagree Strongly Disagree

If you really feel that this statement is true, then you would circle "Strongly Agree."

However, if you feel that there is only a slight possibility that Life Skills classes will help you get a job in the future, then you would circle "Disagree."

Please read the following statements and circle the response below that best reflects your feelings.

1. Reading fiction or novels is a waste of time.

Strongly Agree Agree Undecided Disagree Strongly Disagree

2. Reading stories aloud to children will help them become better readers.

Strongly Agree Agree Undecided Disagree Strongly Disagree

3. Textbooks and manuals are the only kind of reading materials that really help me learn important things.

Strongly Agree Agree Undecided Disagree Strongly Disagree

4. Newspapers and magazines contain important information.

Strongly Agree Agree Undecided Disagree Strongly Disagree

5. Almost all types of reading materials are informative and worth reading.

Strongly Agree Agree Undecided Disagree Strongly Disagree

Please read the following statements and circle the response below that best reflects your feelings.

6. Reading a lot of different kinds of things will help me be a better reader.

Strongly Agree Agree Undecided Disagree Strongly Disagree

7. Reading a lot of different kinds of things can help me be a better thinker.

Strongly Agree Agree Undecided Disagree Strongly Disagree

8. Reading a lot of different things can help me understand other people better.

Strongly Agree Agree Undecided Disagree Strongly Disagree

9. Reading made-up stories is just for little kids.

Strongly Agree Agree Undecided Disagree Strongly Disagree

10. Most adults would be better off if they just read what was necessary to get a particular job done.

Strongly Agree Agree Undecided Disagree Strongly Disagree

11. Reading helps people the most by giving them facts they need to know.

Strongly Agree Agree Undecided Disagree Strongly Disagree

12. Valuable lessons can be learned from reading about other peoples' lives.

Strongly Agree Agree Undecided Disagree Strongly Disagree

13. The most important thing about reading fiction is that it lets you "escape" from your own life.

Strongly Agree Agree Undecided Disagree Strongly Disagree

14. Reading fiction is entertaining, but you don't learn anything important.

Strongly Agree Agree Undecided Disagree Strongly Disagree

Please read the following statements and circle the response below that best reflects your feelings.

15. Watching a movie based on a book is just as good (informative) as reading the book.

Strongly Agree Agree Undecided Disagree Strongly Disagree

16. If you have seen a movie based on a book, there is no good reason to read the book.

Strongly Agree Agree Undecided Disagree Strongly Disagree

17. If you have read a book, there is no reason to see the movie based on it.

Strongly Agree Agree Undecided Disagree Strongly Disagree

18. Watching videos (or going to the movies) is a waste of time.

Strongly Agree Agree Undecided Disagree Strongly Disagree

19. Reading fiction is fine, but it doesn't really help you in "real" life.

Strongly Agree Agree Undecided Disagree Strongly Disagree

20. I enjoy reading fiction.

Strongly Agree Agree Undecided Disagree Strongly Disagree

21. I enjoy reading magazines.

Strongly Agree Agree Undecided Disagree Strongly Disagree

22. I enjoy reading the newspaper.

Strongly Agree Agree Undecided Disagree Strongly Disagree

23. I enjoy reading textbooks and other materials that help me learn about new things.

Strongly Agree Agree Undecided Disagree Strongly Disagree

Please read the following statements and circle the response below that best reflects your feelings.

24. I enjoy watching movies.

Strongly Agree Agree Undecided Disagree Strongly Disagree

25. Reading fiction is easier than reading factual materials (like textbooks).

Strongly Agree Agree Undecided Disagree Strongly Disagree

26. Reading factual materials (like textbooks) is easier than reading fiction.

Strongly Agree Agree Undecided Disagree Strongly Disagree

27. All reading is hard.

Strongly Agree Agree Undecided Disagree Strongly Disagree

28. Reading is a good skill to have, but it is not really related to more important "life-skills."

Strongly Agree Agree Undecided Disagree Strongly Disagree

Appendix B

Interview Questions

TEACHER INTERVIEW

1. What did you think about the program overall?

2. How did the students respond to the program? (More verbal?)

3. How did you select appropriate classes/individuals (if you did)?

4. Did the subject matter of the story hold their interest/was it appropriate for your students?

5. What did you like most about the program? Why?

6. What did you like least about the program? Why?

7. How does this program compare to the way you typically teach reading/work with life skills groups?

8. Did learning outcomes differ in any way from outcomes you normally see? If so, how were they different?

9. Do you think this is a good way to teach reading to your students/work on life skills development with students?

10. Will you continue to use these materials to teach reading/develop life skills?

11. Would you recommend that other reading/life skills teachers use this program?

12. What changes (if any) would you make to the program?

STUDENT INTERVIEW

1. What do you think of the program overall?

2. Do you think it was worth your time to participate in this program? Why or why not?

3. What did you like most about the program?

   Why?

4. What did you like least about the program?

   Why?

5. How does this program compare to other reading units you have done?

Did you like it more or less?
Why?

Did you find it more or less interesting?
Why?

Do you think you learned more or less than in other reading units you have done?
Why?

6. Do you think this is a good way to teach reading?

7. Would you recommend that others participate in this program?

8. What is the most important thing(s) you learned from this program?

9. What changes (if any) would you make to this program?

Appendix C

Student Attitude Survey Results

STUDENT ATTITUDE SURVEY RESULTS
(15 RESPONDENTS)

1. Reading fiction or novels is a waste of time.

Strongly Agree	Agree	Undecided	Disagree	Strongly Disagree	
1	0	2	8	4	PRETEST
1	0	1	8	5	POSTTEST

2. Reading stories aloud to children will help them become better readers.

Strongly Agree	Agree	Undecided	Disagree	Strongly Disagree	
10	4	1	0	0	PRETEST
9	5	0	1	0	POSTTEST

3. Textbooks and manuals are the only kind of reading materials that really help me learn important things.

Strongly Agree	Agree	Undecided	Disagree	Strongly Disagree	
0	1	2	9	3	PRETEST
0	0	1	9	5	POSTTEST

4. Newspapers and magazines contain important information.

Strongly Agree	Agree	Undecided	Disagree	Strongly Disagree	
4	11	0	0	0	PRETEST
7	8	0	0	0	POSTTEST

5. Almost all types of reading materials are informative and worth reading.

Strongly Agree	Agree	Undecided	Disagree	Strongly Disagree	
3	5	3	4	0	PRETEST
5	8	1	0	1	POSTTEST

6. Reading a lot of different kinds of things will help me be a better reader.

Strongly Agree	Agree	Undecided	Disagree	Strongly Disagree	
7	8	0	0	0	**PRETEST**
7	6	1	1	0	**POSTTEST**

7. Reading a lot of different kinds of things can help me be a better thinker.

Strongly Agree	Agree	Undecided	Disagree	Strongly Disagree	
5	9	1	0	0	**PRETEST**
5	8	2	0	0	**POSTTEST**

8. Reading a lot of different things can help me understand other people better.

Strongly Agree	Agree	Undecided	Disagree	Strongly Disagree	
4	9	0	2	0	**PRETEST**
5	8	0	2	0	**POSTTEST**

9. Reading made-up stories is just for little kids.

Strongly Agree	Agree	Undecided	Disagree	Strongly Disagree	
0	0	2	8	5	**PRETEST**
0	0	1	8	6	**POSTTEST**

10. Most adults would be better off if they just read what was necessary to get a particular job done.

Strongly Agree	Agree	Undecided	Disagree	Strongly Disagree	
0	0	1	8	6	**PRETEST**
0	2	0	5	8	**POSTTEST**

11. Reading helps people the most by giving them facts they need to know.

Strongly Agree	Agree	Undecided	Disagree	Strongly Disagree	
3	7	3	2	0	**PRETEST**
3	7	1	3	1	**POSTTEST**

12. Valuable lessons can be learned from reading about other peoples' lives.

Strongly Agree	Agree	Undecided	Disagree	Strongly Disagree	
3	12	0	0	0	**PRETEST**
6	8	1	0	0	**POSTTEST**

13. The most important thing about reading fiction is that it lets you "escape" from your own life.

Strongly Agree	Agree	Undecided	Disagree	Strongly Disagree	
4	4	4	3	0	**PRETEST**
4	7	0	3	1	**POSTTEST**

14. Reading fiction is entertaining, but you don't learn anything important.

Strongly Agree	Agree	Undecided	Disagree	Strongly Disagree	
0	3	5	5	2	**PRETEST**
0	0	0	13	2	**POSTTEST**

15. Watching a movie based on a book is just as good (informative) as reading the book.

Strongly Agree	Agree	Undecided	Disagree	Strongly Disagree	
1	7	0	4	3	**PRETEST**
0	4	0	10	1	**POSTTEST**

16. If you have seen a movie based on a book, there is no good reason to read the book.

Strongly Agree	Agree	Undecided	Disagree	Strongly Disagree	
0	0	0	11	4	PRETEST
0	0	0	8	7	POSTTEST

17. If you have read a book, there is no reason to see the movie based on it.

Strongly Agree	Agree	Undecided	Disagree	Strongly Disagree	
0	0	0	12	3	PRETEST
0	1	0	8	6	POSTTEST

18. Watching videos (or going to the movies) is a waste of time.

Strongly Agree	Agree	Undecided	Disagree	Strongly Disagree	
0	0	1	11	3	PRETEST
0	0	0	8	7	POSTTEST

19. Reading fiction is fine, but it doesn't really help you in "real" life.

Strongly Agree	Agree	Undecided	Disagree	Strongly Disagree	
0	4	3	5	2	PRETEST
1	2	0	9	3	POSTTEST

20. I enjoy reading fiction.

Strongly Agree	Agree	Undecided	Disagree	Strongly Disagree	
4	7	1	3	0	PRETEST
3	10	2	0	0	POSTTEST

21. I enjoy reading magazines.

Strongly Agree	Agree	Undecided	Disagree	Strongly Disagree	
4	10	1	0	0	PRETEST
4	11	0	0	0	POSTTEST

22. I enjoy reading the newspaper.

Strongly Agree	Agree	Undecided	Disagree	Strongly Disagree	
4	11	0	0	0	PRETEST
3	11	1	0	0	POSTTEST

23. I enjoy reading textbooks and other materials that help me learn about new things.

Strongly Agree	Agree	Undecided	Disagree	Strongly Disagree	
5	8	2	0	0	PRETEST
4	9	2	0	0	POSTTEST

24. I enjoy watching movies.

Strongly Agree	Agree	Undecided	Disagree	Strongly Disagree	
6	9	0	0	0	PRETEST
7	7	1	0	0	POSTTEST

25. Reading fiction is easier than reading factual materials (like textbooks).

Strongly Agree	Agree	Undecided	Disagree	Strongly Disagree	
0	2	3	9	1	PRETEST
0	6	3	5	1	POSTTEST

26. Reading factual materials (like textbooks) is easier than reading fiction.

Strongly Agree	Agree	Undecided	Disagree	Strongly Disagree	
0	5	5	5	0	PRETEST
0	4	4	7	0	POSTTEST

27. All reading is hard.

Strongly Agree	Agree	Undecided	Disagree	Strongly Disagree	
1	0	1	10	3	PRETEST
0	1	0	8	6	POSTTEST

28. Reading is a good skill to have, but it is not really related to more important "life-skills."

Strongly Agree	Agree	Undecided	Disagree	Strongly Disagree	
0	0	0	6	9	PRETEST
0	3	0	6	6	POSTTEST